

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 10185 2/14/2001]

[Docket No. 2000-SW-65-AD; Amendment 39-12106; AD 2000-25-54]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Model A109E Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This document publishes in the **Federal Register** an amendment adopting Airworthiness Directive (AD) 2000-25-54, which was sent previously to all known U.S. owners and operators of Agusta (Agusta) S.p.A. Model A109E helicopters by individual letters. This AD requires, before each start of the engines, visually checking both sides of each tail rotor blade (blade) for a crack and, at specified intervals, inspecting each blade for a crack using a 5-power or higher magnifying glass. Dye-penetrant inspecting each blade for a crack is also required at specified time intervals. If a crack is found, replacing the blade with an airworthy blade is required before further flight. This amendment is prompted by five reports of cracked tail rotor blades. The actions specified by this AD are intended to prevent failure of a blade and subsequent loss of control of the helicopter.

DATES: Effective March 1, 2001, to all persons except those persons to whom it was made immediately effective by Emergency AD 2000-25-54, issued on December 12, 2000, which contained the requirements of this amendment.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 1, 2001.

Comments for inclusion in the Rules Docket must be received on or before April 16, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2000-SW-65-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

The applicable service information may be obtained from Agusta, 21017 Cascina Costa di Samarate (VA) Italy, Via Giovanni Agusta 520, telephone 39 (0331) 229111, fax 39 (0331) 229605-222595. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Richard Monschke, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110, telephone (817) 222-5116, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION: On December 12, 2000, the FAA issued Emergency AD 2000-25-54 for Agusta Model A109E helicopters which requires, before each start of the engines, visually checking both sides of each blade for a crack and, at specified intervals, inspecting each blade for a crack using a 5-power or higher magnifying glass. Dye-penetrant inspecting each blade for a crack is also required at specified time intervals. If a crack is found, replacing the blade with an airworthy blade is required before further flight. That action was prompted by five reports of cracked tail rotor blades. The cracks were discovered during maintenance and also during flight due to an increase in tail

rotor vibration. The manufacturer is currently investigating the cause of these cracks. This condition, if not corrected, could result in failure of a blade and subsequent loss of control of the helicopter.

The Ente Nazionale per l'Aviazione Civile (ENAC), which is the airworthiness authority for Italy, notified the FAA that an unsafe condition may exist on Agusta Model A109E helicopters. The ENAC advises inspecting certain blades for a crack in accordance with Agusta Alert Bollettino Tecnico No. 109EP-14, dated October 11, 2000 (ABT).

The FAA has reviewed the ABT, which specifies checking the upper and lower sides of each blade, part number (P/N) 109-8132-01-109, for a crack before each flight. The ABT also specifies visually inspecting the blades for a crack, using a 5-power magnifying lens, each 10 operating hours or if any abnormal increase of vibratory level occurs. In addition, the ABT specifies dye-penetrant inspecting the blades for a crack at each 25 operating hours. The ABT specifies replacing any cracked blade before further flight. The ENAC classified the ABT as mandatory and issued AD 2000-468, dated December 10, 2000, to ensure the continued airworthiness of these helicopters in Italy.

This helicopter model is manufactured in Italy and is typed certificated for operation in the United States under the provisions of 14 CFR 21.29 and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the ENAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the ENAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since the unsafe condition described is likely to exist or develop on other Agusta Model A109E helicopters of the same type design, the FAA issued Emergency AD 2000-25-54 to prevent failure of a blade and subsequent loss of control of the helicopter. The AD requires the following for each blade, part number 109-8132-01-109:

- Before each start of the engines, visually check both sides of each blade for a crack.
- Within 10 hours time-in-service (TIS) and thereafter at intervals not to exceed 10 hours TIS or before the next flight after any abnormal tail rotor vibration, inspect each blade for a crack using a 5-power or higher magnifying glass.
- Within 25 hours TIS and thereafter at intervals not to exceed 25 hours TIS, dye-penetrant inspect each blade for a crack.
- If a crack is found, replace the blade with an airworthy blade before further flight.

An owner/operator (pilot) may perform the visual check required by this AD and must enter compliance with paragraph (a) of this AD into the aircraft maintenance records in accordance with 14 CFR 43.11 and 91.417(a)(2)(v)). This AD allows a pilot to perform this check because it involves only a visual check for a crack in the blade and can be performed equally well by a pilot or a mechanic.

The actions must be accomplished in accordance with the ABT described previously. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the structural integrity and controllability of the helicopter. Therefore, the actions previously listed are required at the specified intervals, and this AD must be issued immediately.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual letters issued on December 12, 2000, to all known U.S. owners and operators of Agusta Model A109E helicopters. These conditions still exist, and the AD is hereby published in the **Federal Register** as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons. Paragraph (a) of the emergency AD contained a typographical error in that it referenced 91.147(a)(2)(v) (a non-existent regulation). The correct reference should have been 91.417(a)(2)(v). This document corrects that error.

The FAA estimates that 21 helicopters of U.S. registry will be affected by this AD. It will take approximately ½ work hour per helicopter to inspect each blade using a magnifying glass; 2 work hours to dye-penetrant inspect each blade; and 1 work hour to replace each blade, if necessary. The average labor rate is \$60 per work hour. Required parts will cost approximately \$5,000 per blade. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$122,640 (\$5,840 per helicopter, assuming that each helicopter blade is inspected 4 times, dye-penetrant inspected twice, and both blades are replaced on all helicopters).

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their mailed comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2000-SW-65-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:
Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2000-25-54 AGUSTA S.p.A.: Amendment 39-12106. Docket No. 2000-SW-65-AD.

Applicability: Model A109E helicopters, with tail rotor blade (blade), part number 109-8132-01-109, installed, certificated in any category.

Note 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of a blade and subsequent loss of control of the helicopter, accomplish the following:

(a) Before each start of the engines, visually check both sides of each blade for a crack, in the area shown in Figure 1. An owner/operator (pilot), holding at least a private pilot certificate, may perform the visual check required by this paragraph and must enter compliance into the aircraft maintenance records in accordance with 14 CFR 43.11 and 91.417(a)(2)(v).

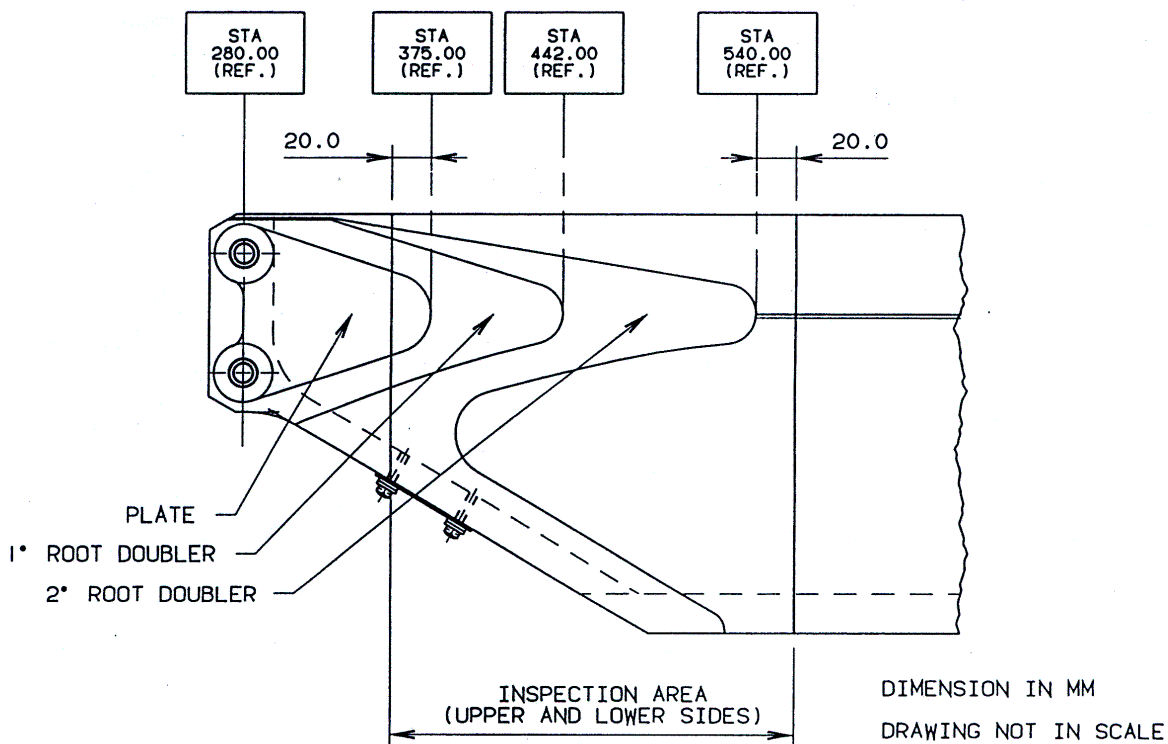


FIGURE 1

Note: Paint irregularities may be due to cracks.

(b) Within 10 hours time-in-service (TIS) and thereafter at intervals not to exceed 10 hours TIS or before the next flight after any abnormal tail rotor vibration, inspect each blade for a crack using a 5-power or higher magnifying glass in accordance with the Compliance Instructions, Part II, of Agusta S.p.A. Alert Bollettino Tecnico No. 109EP-14, dated October 11, 2000 (ABT).

(c) Within 25 hours TIS and thereafter at intervals not to exceed 25 hours TIS, dye-penetrant inspect each blade for a crack in accordance with the Compliance Instructions, Part III, of the ABT.

(d) If a crack is found, replace the blade with an airworthy blade before further flight.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Regulations Group, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Regulations Group.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Regulations Group.

(f) Special flight permits are prohibited.

(g) The inspections shall be done in accordance with the Compliance Instructions, Parts II and III, of Agusta S.p.A. Alert Bollettino Tecnico No. 109EP-14, dated October 11, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Agusta, 21017 Cascina Costa di Samarate (VA) Italy, Via Giovanni Agusta 520, telephone 39 (0331) 229111, fax 39 (0331) 229605-222595. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on March 1, 2001, to all persons except those persons to whom it was made immediately effective by Emergency AD 2000-25-54, issued December 12, 2000, which contained the requirements of this amendment.

FOR FURTHER INFORMATION CONTACT: Richard Monschke, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110, telephone (817) 222-5116, fax (817) 222-5961.

Issued in Fort Worth, Texas, on February 2, 2001.

Eric Bries, Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.